

**REMARKS**

**Summary of the Office Action**

Claims 1-19 and 32-50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim et al. (US 5,517,342) in view of Sato (US 6,770,908).

Claims 7-10, 16-19, 38-41, and 47-50 are objected to for allegedly reciting “unclear” features.

**Summary of the Response to the Office Action**

Applicants have amended claims 1 and 32 to further define the invention. Accordingly, claims 1-50 are pending for consideration with claims 20-31 having been withdrawn.

**Claim Objections**

Claims 7-10, 16-19, 38-41, and 47-50 are objected to for allegedly reciting “unclear” features. Specifically, claims 7-10 and 38-41 are objected to because it “is unclear which ‘first’ protrusion/depression layer the claim is referring to since there appear to be more than one ‘first set’ of protrusions/depressions, one on the gate line (claim 1) and one on the substrate (claim 7).” Similarly, claims 16-19 and 47-50 are objected to because it “is unclear which ‘second’ protrusion/depression layer the claim is referring to since there appear to be more than one ‘second set’ of protrusions/depressions, one of the semiconductor layer (claim 13) and one on the substrate (claim 16).” Applicants respectfully disagree.

Initially, Applicants respectfully request clarification in the next Office Communication regarding the specific reasons for the objection to claims 38-41 and 47-50. For purposes of Applicants’ response herein, claims 38-41 and 47-50 are presumed to be objected to for reasons

similar to reasons why claims 7-10 and 16-19, respectively, are being objected to. Accordingly, Applicants' remarks with regard to claims 7-10 and 16-19 will parallel the remarks with regard to claims 38-41 and 47-50, respectively.

Applicants respectfully assert that the language of claim 1 clearly recites that "each of the gate lines having at least one first set of protrusions and depressions with respect to thickness direction of the substrate," whereas claim 7 recites "at least one first protrusion/depression *layer* on the substrate to form the first set of protrusions and depressions." Accordingly, Applicants respectfully assert that claim 1 recites that each of the gates lines has "at least one first set of protrusions and depressions," and claim 7 recites at least one first protrusion/depression *layer* to form the first set of protrusions and depressions. Thus, Applicants respectfully assert that two different features are being recited by claims 1 and 7: gate lines having at least one first set of protrusions and depressions; and at least one first protrusion/depression *layer* to form the first set of protrusions and depressions.

Applicants' reasoning presented above is also applicable to the features recited by claims 38 with respect to independent claim 32. For example, Applicants respectfully assert that two different features are being recited by claims 32 and 38: gate lines having at least one first set of protrusions and depressions; and at least one first protrusion/depression *layer* to form the first set of protrusions and depressions.

Applicants respectfully assert that the language of claim 13 clearly recites "a second set of protrusions and depressions in the semiconductor layer," whereas claim 16 recites "a second protrusion/depression *layer* in the substrate to form the second set of protrusions and

depressions.” Accordingly, Applicants respectfully assert that claim 13 recites a semiconductor *layer* having “a second set of protrusions and depressions,” and claim 16 recites “a second protrusion/depression *layer* in the substrate to form the second set of protrusions and depressions.” Thus, Applicants respectfully assert that two different features are being recited by claims 13 and 16: a *semiconductor layer* having a second set of protrusions and depressions; and a *second protrusion/depression layer* to form the second set of protrusions and depressions.

Applicants’ reasoning present above is also applicable to the features recited by claims 47 with respect to claim 44. For example, Applicants respectfully assert that two different features are being recited by claims 44 and 47: forming a second set of protrusions and depressions in the semiconductor layer; and forming a second protrusion/depression layer to form the second set of protrusions and depressions.

For at least the above reasons, Applicants respectfully submit that each of the features recited by claims 7-10, 16-19, 38-41, and 47-50 are clearly presented. Thus, Applicants respectfully request that the objections to claims 7-10, 16-19, 38-41, and 47-50 be withdrawn.

**All Claims Define Allowable Subject Matter**

Claims 1-19 and 32-50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim et al. (US 5,517,342) in view of Sato (US 6,770,908). Applicants respectfully traverse this rejection as being based upon combinations of references that neither teach nor suggest the novel combination of features recited in amended independent claims 1 and 32, and hence dependent claims 2-19 and 33-50.

Independent claim 1, as amended, recites a liquid crystal display device including, in part, a plurality of gate lines, “each of the gate lines having at least one first set of protrusions and depressions extending with respect to a thickness direction of the substrate.” Similarly, independent claim 32, as amended, recites a method of fabricating a liquid crystal display device including, in part, a step of forming a plurality of gate lines, “each of the gate lines having at least one first set of protrusions and depressions extending with respect to a thickness direction of the substrate.”

In contrast to Applicants’ claimed invention, the protrusions and depressions 10 alleged by the Office Action to be taught by Kim et al. in FIG. 1 are disposed to extend parallel to a thickness of the substrate 100 (in FIG. 2) of Kim et al. Accordingly, Applicants respectfully assert that Kim et al. fails to teach or suggest a plurality of gate lines such that “each of the gate lines having at least one first set of protrusions and depressions extending with respect to a thickness direction of the substrate,” as recited by amended independent claims 1 and 32, and hence dependent claims 2-19 and 33-50.

Furthermore, Applicants respectfully assert that Sato fails to remedy the deficiencies of Kim et al., as discussed above, since Sato is completely silent with regard to gate lines having protrusions and depression that extend with respect to a thickness of a substrate.

For the above reasons, Applicants respectfully assert that the rejections under 35 U.S.C. § 103(a) should be withdrawn because Kim et al. and Sato, whether taken individually or in combination, neither teach nor suggest the novel combination of features clearly recited in amended independent claims 1 and 32, and hence dependent claims 2-19 and 33-50.

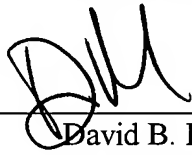
**CONCLUSION**

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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